

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended, and in light of the following discussion, is respectfully requested.

Claims 1-8 and 10 are pending in this application, Claims 9 and 11 having been canceled without prejudice or disclaimer; and Claims 1-4, 8 and 10 having been presently amended. Support for amended Claims 1-4, 8 and 10 can be found, for example, in the original claims, drawings, and specification as originally filed. No new matter has been added.

In the outstanding Office Action, the claims were objected to due to informalities; Claims 1-11 were rejected under 35 U.S.C. § 112, second paragraph; Claims 9 and 11 were rejected under 35 U.S.C. § 101; Claims 1-6 and 8-11 were rejected under 35 U.S.C. § 102(b) as anticipated by Kita et al. (U.S. Patent No. 5,394,347; hereinafter “Kita”); and Claim 7 was rejected under 35 U.S.C. § 103(a) as patentable over Kita in view of Giusto, Paolo et al. (“Automotive Virtual Integration Platforms: Why’s, What’s, and How’s;” hereinafter “Giusto”).

In response to the objection to the claims, Applicant has amended Claims 4 and 11 in accordance with the suggestions set forth in the outstanding Office Action. Accordingly, Applicant’s respectfully submits that the objection to the claims has been overcome.

In response to the rejection of Claims 1-11 under 35 U.S.C. § 112, second paragraph, Applicant has amended Claims 1, 2, and 8 to correct the informalities noted in the outstanding Office Action. Also, Applicant has canceled Claim 11 rendering the rejection of this claim moot. In regard to Claim 3, page 3 of the outstanding Office Action asserts that there is insufficient antecedent basis for the limitation “the functions implementing the service,” however, Applicant respectfully notes that this limitation has antecedent basis at line 2 of Claim 2, as this portion describes one or more functions implementing each user

request. In regard to the rejection of Claim 7, page 4 of the outstanding Office Action asserts that there is insufficient antecedent basis for the limitation “all replicated objects,” however, Applicant notes that no antecedent basis for this term is required, as this is the first recitation of this feature.

Accordingly, Applicant respectfully requests that the rejection of Claims 1-11 under 35 U.S.C. § 112, second paragraph, be withdrawn.

In response to the rejection of Claims 9 and 11 under 35 U.S.C. § 101, Applicant has canceled Claims 9 and 11 rendering this rejection moot. Accordingly, Applicant respectfully requests that the rejection of Claims 9 and 11 under 35 U.S.C. § 101 be withdrawn.

In response to the rejection of Claims 1-6 and 8-11 under 35 U.S.C. § 102(b) as anticipated by Kita, Applicant respectfully submits that amended independent Claim 1 recites novel features clearly not taught or rendered obvious by the applied reference.

Independent Claim 1 is directed to a method of designing a validation environment for a service implemented by an embedded electrical system, the method including, *inter alia*:

... assigning to said service one or more user requests and system responses of the electrical system thereto;

assigning to said service a behavioral automata, said behavioral automata fixing allowed sequencing of said user requests and said system responses;

automatically generating a skeleton validation environment for said service, in the form of a program executable on a simulation tool, said skeleton validation environment including a testing automata produced from a traversal of said behavioral automata, a model of initial conditions, models of user requests, models of system response accuracy, an environmental model and dataflow and control flow which assemble these models together, and said skeleton validation environment covering all user requests and resultant system responses of said service; and

recording said skeleton validation environment in a computer readable memory device for use by a design validation tool.

Kita is directed to a computer system and software that enable a designer to create a specification for a system that can be expressed as an extended finite state machine (EFSM), wherein the functions of the system are modeled as states and transitions.<sup>1</sup> Kita also describes that the specifications that are particularly suitable for modeling are software applications and physical systems running from alarm clocks to automatic teller machines to complex system such as aircraft.<sup>2</sup> Page 6 of the outstanding Office Action asserts that Kita describes “assigning to said service one or more user requests (C6 L11-- see the events) and system responses thereto (C6 L6 -- see the transitions associated with events).”

Column 5, lines 65 to column 6, line 10 of Kita states:

Elements of an EFSM as used herein include:

a declaration section including the name of the model, formal parameters and internal variables. These include calling parameters and local, externally referenced and scoped variables, which are defined below.

machine states. A given state may be an ENTRY state, an EXIT state, or an OTHER type of state, namely an normal (non-model) state.

transitions: mapping between states (a function of current state, current input and current context), resulting in the next state, next action and next context only if the value of an associated predicate for the transition is TRUE.

Thus, this portion of Kita merely describes definitions of elements of the EFSM. Kita describes that transitions are a mapping between states which are a function of the current state, current input and current context, resulting in the next state, next action and next context only if the value of the associated predicate for the transition is true. However, this portion of Kita does not describe assigning to a service implemented by an embedded

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<sup>1</sup> See column 2, lines 18-22 of Kita.

<sup>2</sup> See column 1, lines 12-15 of Kita.

electrical system behavioral automata *fixing* allowed sequencing of user requests and responses of the electrical system to the user requests, as in Applicant's amended Claim 1.

Thus, Applicant respectfully submits that independent Claim 1 (and all claims depending thereon) patentably distinguishes over Kita.

Accordingly, Applicant respectfully requests that the rejection of Claims 1-6 and 8-11 under 35 U.S.C. § 102(b) as anticipated by Kita be withdrawn.

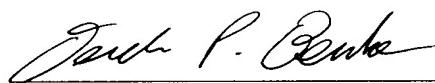
In response to the rejection of Claim 7 under 35 U.S.C. § 103(a) as unpatentable over Kita in view of Giusto, Applicant notes that Claim 7 is dependent on Claim 1 and is thus believed to be patentable for at least the reasons discussed above. Further, Applicant respectfully submits that Giusto fails to cure any of the above-noted deficiencies of Kita.

Accordingly, Applicant respectfully requests that the rejection of Claim 7 under 35 U.S.C. § 103(a) as unpatentable over Kita in view of Giusto be withdrawn.

Consequently, in view of the present amendment, and in light of the above discussion, the pending claims as presented herewith are believed to be in condition for formal allowance, and an early and favorable action to that effect is respectfully request

Respectfully submitted,

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